RECLAMATION

Managing Water in the West

Draft Environmental Assessment

Santa Clara Valley Water District Access Road Repair – Calaveras Fault Crossing

EA-06-91

San Felipe Lake

Table of Contents

List of Acronyms, Abbreviations, and Definition of Terms

Af(y) or af/y	Acre-feet (per year). One acre-foot equals 325,851 gallons (the volume of water one foot deep and an acre in area).
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CFC	Calaveras Fault Crossing
CFI	Calaveras Fault Inlet
CFO	Calaveras Fault Outlet
CNDDB	California Natural Diversity Database
Contractor	City, county water or irrigation District contracted with Federal or State Agencies to obtain water.
CVP	Central Valley Project
Delta	Sacramento-San Joaquin Delta
District	Santa Clara Valley Water District
DWR	(California) Department of Water Resources
EA	Environmental Assessment
EOC	Emergency Operations Center
ESA	Endangered Species Act
ITA	Indian Trust Assets
M&I	Municipal and Industrial, typically referring to the purpose of use of water
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
Projects	Central Valley Project and the State Water Project
Reclamation	U.S. Bureau of Reclamation
SCC	Santa Clara Conduit
Service	U.S. Fish & Wildlife Service
SWP	(California) State Water Project
T&E Species	Threatened and Endangered species, as defined by the Federal Endangered Species Act

Section 1 Purpose and Need for Action

1.1 Background

Background: In the mid 1980s, the United States Bureau of Reclamation (Reclamation) built the San Felipe Division of the Central Valley Project (CVP). The San Felipe Division brings water from San Luis Reservoir through the Pacheco Tunnel to the Santa Clara Conduit (SCC). Near Hollister in San Benito County (see Figures A-1 and A-2), the area where the proposed action would take place on the SCC is known as the Calaveras Fault Crossing (CFC). The three road repair sites are located between Calaveras Fault Outlet (CFO) Vault #15 and Calaveras Fault Inlet (CFI) Vault # 14. Reclamation owns the facility, but the Santa Clara Valley Water District (District) has an agreement with Reclamation to operate the SCC and appurtenant facilities and also to conduct routine maintenance as required to keep the facilities operational.

There is only one access road to the facilities (vaults, valves, pipelines and instrumentation) at the CFC near the Calaveras Fault (see Figures A-2). The access road was built in the late 1980s on top of a causeway that crosses a low-lying ephemeral lake bed, San Felipe Lake. The access road is approximately 15 feet wide and eight to ten feet high, and over the past few years has developed three minor slope failures on the north side. The failures progress in the winter, resulting in unacceptable loss of road width, which if not repaired, threatens to interrupt use of the road and limit access to critical District facilities. Existing telemetry cable lines are buried in the road surface and will need to be temporarily re-located during the road repair activities. The cable will be permanently replaced after the road repairs are complete. These telemetry cables monitor the effects from seismic activity on the integrity of the SCC.

Other Environmental Documents and Geotechnical Investigation

In October 2005, a geotechnical investigation was conducted by a geotechnical engineering consultant who provided an evaluation and recommendations for permanent road repair. The environmental clearance and California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) compliance for the geotechnical investigation were provided by a separate CEQA/NEPA review. To satisfy the requirement of CEQA for this project a Notice of Exemption (NOE) for this project was completed May 11, 2005. To satisfy the requirements of NEPA a Categorical Exclusion Checklist (CEC) was prepared (CEC-05-42) entitled "Geotechnical Investigation Work, Calaveras Fault Crossing, Santa Clara Conduit of the San Felipe Division." The CEC was signed May 20, 2005.

A temporary repair was done to two locations on the north side of the levee in 2005. (CEC-05-60 was completed on July 21, 2005.) An Environmental Assessment (EA) (EA-07-53 *Pipeline Maintenance Program, Santa Clara Valley Water District*) which analyzes all of the operation and maintenance work needed for delivery of CVP water to the District is underway however due to the need for completion of these repairs in a limited window of time, (from the late summer to the early fall 2007), this EA will analyze these three road repairs only. This EA will also analyze the effects of any future necessary road repairs in the vicinity.

In order to comply with CEQA, the District has prepared a NOE for the proposed project (see Appendix B). It was approved by the District's CEO on July 26, 2006.

1.2 Purpose and Need

The SCC conveys CVP water to the District. Maintenance of the SCC is imperative to continue ongoing CVP water deliveries. A portion of the conduit runs over a strike slip fault that creeps several millimeters per year. The slow but continuous creep requires more frequent access to the SCC for inspection and repair due to the constant stresses on the pipeline. The purpose of the project is to repair the existing access road allowing maintenance opportunities on the SCC in the vicinity of the Calaveras Fault. The repair is needed to allow continued access to maintain existing facilities that provide vital water supplies to Santa Clara County.

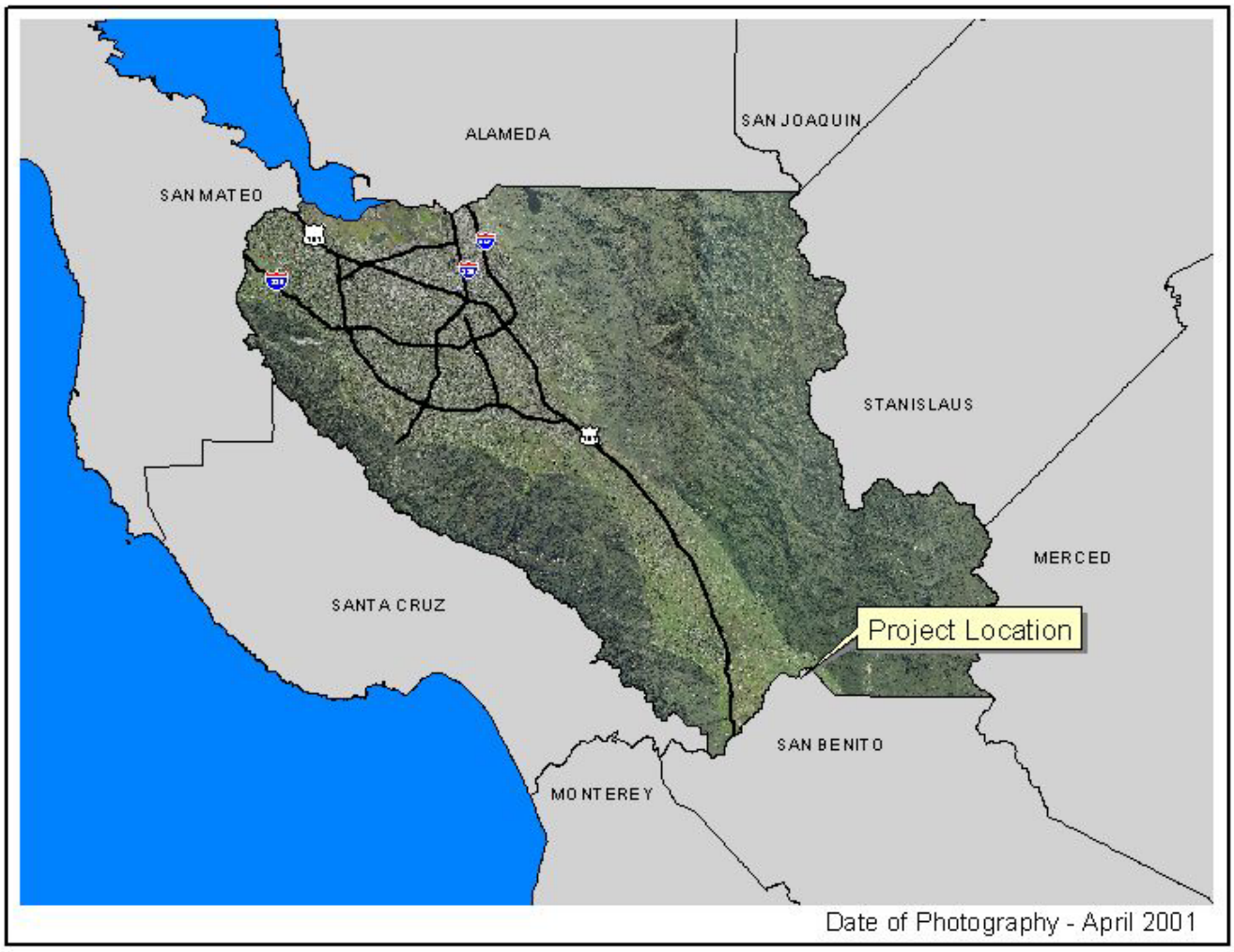
1.3 Scope

This EA has been prepared to examine the impacts on environmental resources as a result of repairing three locations on an access road allowing repair of the SCC. This EA focuses primarily on the location surrounding the access road repair locations however impacts on the District are also reviewed since without the proposed action there may be interruption to water deliveries.

1.4 Potential Issues

- Water Resources
- Land Use
- Biological Resources
- Cultural Resources
- Indian Trust Assets
- Socioeconomic Resources
- Environmental Justice

Figure A-1: Santa Clara Conduit Calaveras Fault Crossing Access Road Repair Project Regional Location.



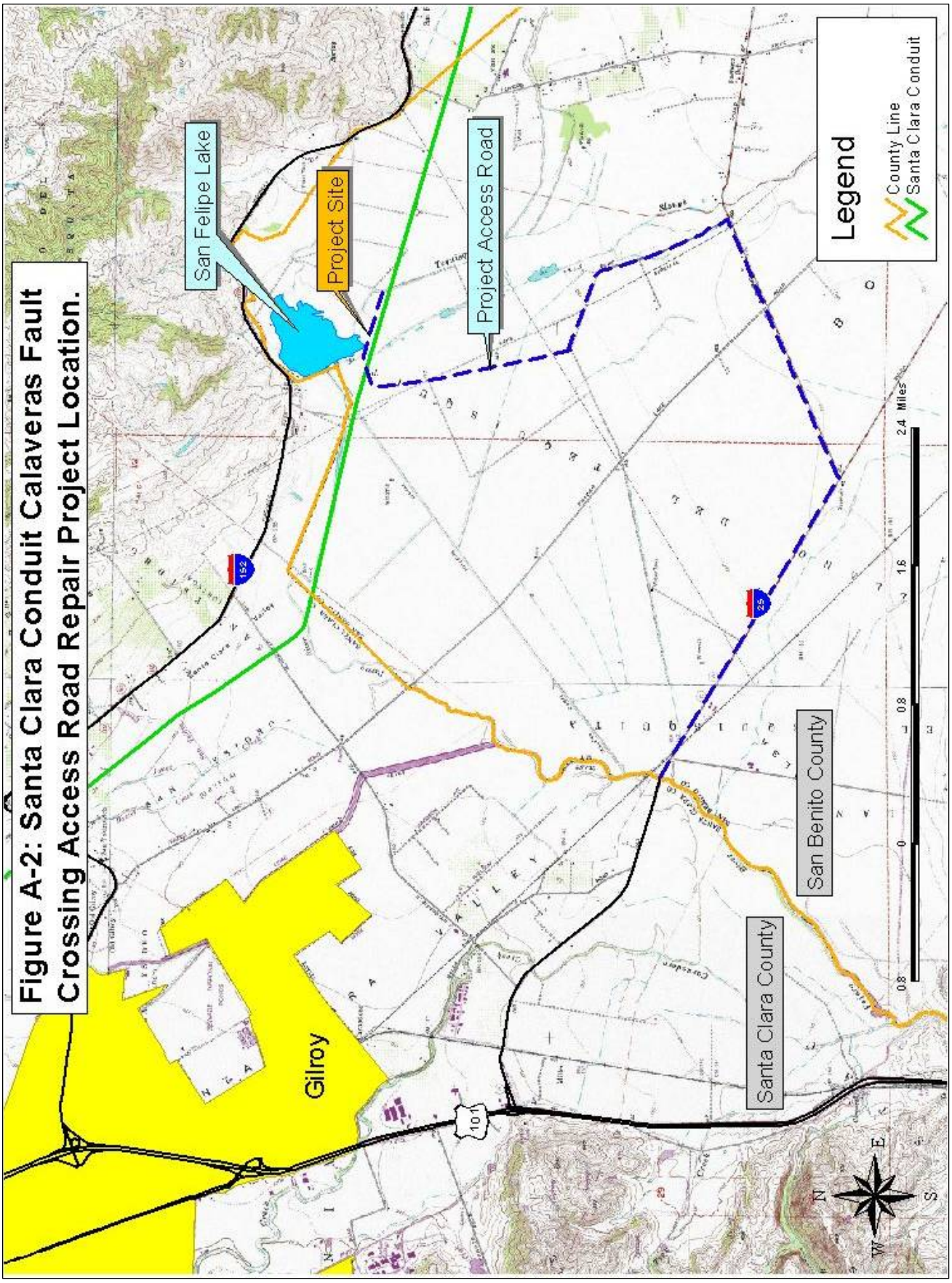


Figure A-2: Santa Clara Conduit Calaveras Fault Crossing Access Road Repair Project Location.
San Felipe Lake
Project Site
Project Access Road
Legend
County Line
Santa Clara Conduit
Gilroy
Santa Clara County
San Benito County
152
25
101
0.8
0
0.8
1.6
2.4 Miles
N
E
S
W

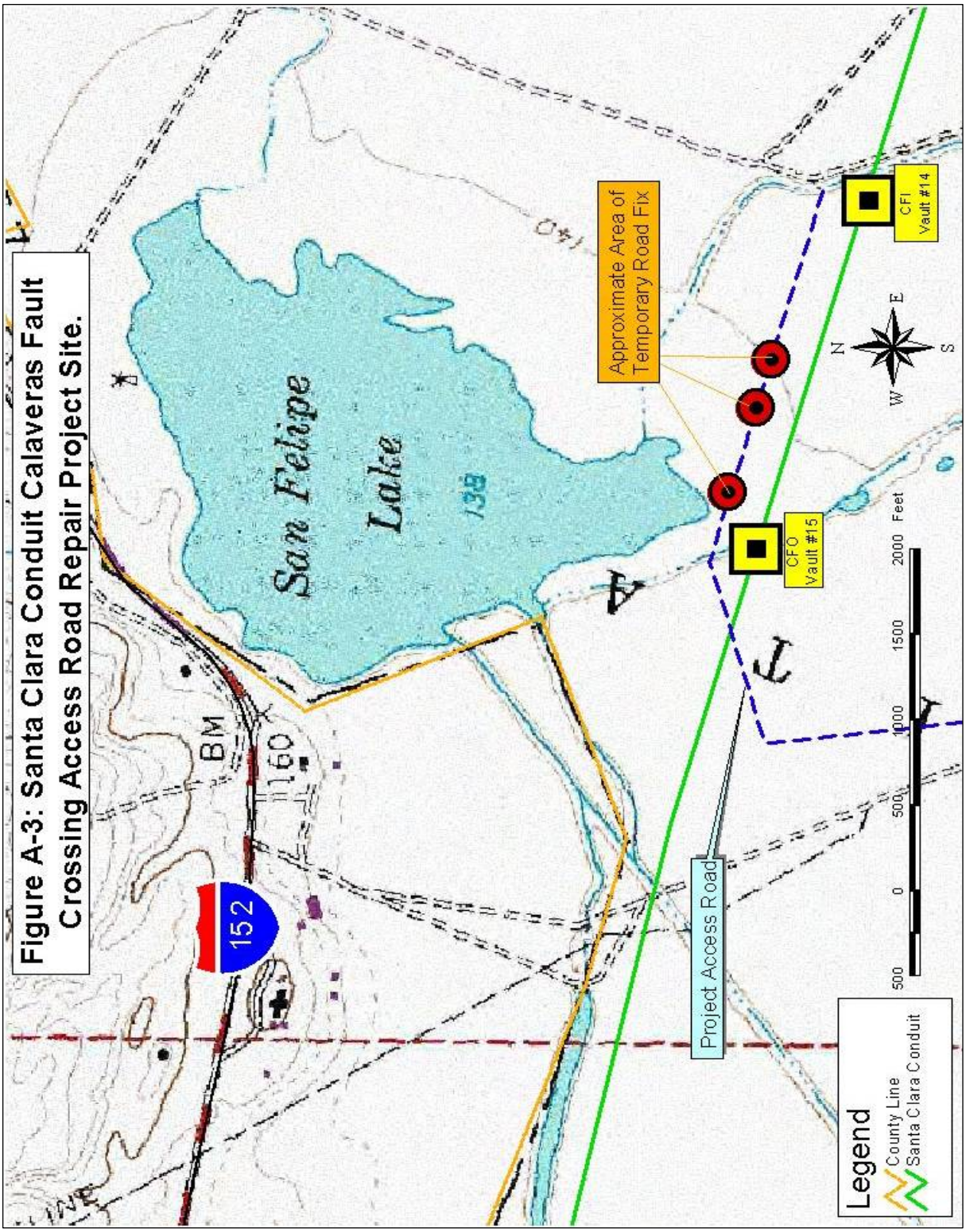


Figure A-3: Santa Clara Conduit Calaveras Fault Crossing Access Road Repair Project Site.
San Felipe Lake
Approximate Area of Temporary Road Fix
CFO Vault #15
CFI Vault #14
Project Access Road
152
BM
160
Legend
County Line
Santa Clara Conduit
500
0
500
1000
1500
2000 Feet
N
S
E
W

Section 2 Alternatives Including Proposed Action

2.1 Alternative A – No Action

Under the No Action alternative, Reclamation would not approve the access road repair project. Routine access to the facilities could be limited or severed. No preventative maintenance repair work would be done unless staff walked more than a mile which would happen infrequently if at all. Work using small hand tools would be the only work achievable without vehicular ingress and egress. Maintenance and repair of the SCC would be likely to only occur if there was a catastrophic failure of the facilities under emergency conditions. This work would require the materials and equipment to be brought in by helicopter at great expense. If the required maintenance would result in a health and safety emergency, due to loss of the District's water supply, the work may be accomplished potentially without environmental permits and controls. The cost of a catastrophic repair would be much greater than the cost of routine preventative maintenance potentially having an impact on municipal water rates.

2.2 Alternative B - Proposed Action

The Proposed Action consists of the repair of three slope failures on the north side of the access road causeway; see Appendix C for the conceptual design drawing of the repair. The intent of the design is to maintain the road width, unload the failing portion of the existing north slope, and prevent the existing slope failures from progressing.

This project proposes the installation of Geofoam blocks beneath the crest of the roadway (see Appendix C). Geofoam is made from cellular plastic material and is produced in block form; it is very lightweight and has a high strength-to-density ratio. It has been used successfully in various highway and road construction applications.

Road Repair - Method of Construction

The upper four to six feet of the levee crown in the area of the existing slope failures will be excavated. All excavation equipment will be confined to the existing access road. The excavated material will be stockpiled on the roadway and reused in thin (<12") compacted layers of backfill. Geofoam blocks will be installed at the head of the slide to reduce the driving force of the slide mass and build up the original road grade. The Geofoam will be covered with approximately three feet of backfill. The repaired areas will be re-compacted and the all-weather gravel road surface will be restored. The excavations will be confined to three feet above the toe of the levee or the level of the lake, whichever is higher.

Two staging areas would be used, one located near the CFI and the other at the CFO. There is sufficient room around the valve yard concrete pads at each end of the roadway to park equipment (such as crew trucks, backhoe, excavator, loader) when not in use, and yet retain access on the road. Two earthen access ramps that extend from the causeway road crown north to lake bottom and south toward pastureland will be used to stockpile materials such as the existing facing rock, sand, Class 2 base rock, and any excavated material that will not be re-used.

Construction will occur at the three slope failure sites, located between approximately 300 and 600 feet apart, indicated in Figure A-3 as red dots. The length of each repair is expected to be less than 50 feet. The total volume of excavation and backfill for the three sites is estimated to be 400 to 600 cubic yards.

Telemetry Cable Replacement

The excavation required for the road repairs will interrupt the existing direct-buried telemetry cable lines. To ensure continuous communication while the road is being repaired, two new splice boxes will be permanently installed one foot below the road surface on either side of the construction area. A temporary telemetry cable in two-inch diameter PVC conduit will be installed between the new splice boxes on the south side of the roadway. After road repairs are complete, a new cable trench will be excavated between the two new splice boxes, a distance of approximately 900 feet. A new, permanent, two-inch diameter PVC conduit will be installed in the trench, the trench will be back-filled and a new permanent cable will be pulled through the conduit. The temporary cable will be disconnected and the new cable reconnected. The existing cable will be abandoned in-place or removed.

Timeframe

The proposed project will take approximately two weeks to complete and is scheduled to take place during the dry season in late summer/early fall. The proposed project must occur within an eleven week window – August 15th through October 31st – determined by the close of the burrowing owl nesting season and the onset of the rainy season. The proposed project must not begin before August 15th or before a District biologist clears the site in order to avoid potential environmental impacts associated with sensitive species and the Migratory Bird Treaty Act. All project-related activities will occur during the work week, during normal business hours.

Section 3 Affected Environment & Environmental Consequences

3.1 Water Resources

3.1.1 Affected Environment

The Santa Clara Conduit provides water to customers in the District has access to Central Valley Project water, State Water Project (SWP) water and ground water.

Imported water comes to the Santa Clara County (County) from the Sierra Nevada Mountains via the Sacramento/San Joaquin Delta. This water is delivered by the SWP and the CVP. Imported water is conveyed to the County through three main pipelines: the South Bay Aqueduct, which carries water from the SWP, and the Santa Clara Conduit and Pacheco Conduit, which bring water from the CVP. The San Francisco Water Department conveys Hetch-Hetchy water into the County through its own facilities. (SCVWD 2001)

The District operates and maintains 18 major recharge ponds, with a combined surface area of more than 320 acres, and over 30 local creeks. Runoff is captured in the District's reservoirs and released into both instream and offstream recharge ponds for percolation into the groundwater basin. In addition, imported water is delivered by the raw water conveyance system to streams and ponds for groundwater recharge. The annual average recharge of these systems is 157,200 af.

The groundwater system in the County performs multiple functions: treatment, transmission, and storage. Water enters the groundwater subbasins through recharge areas generally located at or near the subbasins' perimeter, and is transmitted into the deeper confined aquifer of the central part of the valley. In the process, the water is filtered and becomes suitable for drinking. Eventually the groundwater reaches pumping zones, where it is extracted for municipal, industrial and agricultural uses. The groundwater basin has vast storage capacity, enabling supplies to be carried over from wet years to dry years. District staff estimate the operational storage capacity of the three groundwater subbasins within the District to be 500,000 ac-ft. (SCVWD 2001)

Municipal and Industrial (M&I) water use, which includes residential, commercial, industrial, and institutional water use, has grown as a result of urbanization. Conversely, agricultural water use has declined as irrigated agricultural land has been converted to other uses. Environmental demands, such as water required to meet downstream fishery needs, have been minimal in the past but may become more significant in the future.

The District has been recording water use in the northern part of the County (North County) since 1964, but its records for the southern portion of the County (South County) water usage are relatively short, beginning in July 1987. For the North County, water use has varied from a low of about 175,000 af in 1965 to a high of about 349,000 af in 1987. In 1999, North County water use was 318,000 af, of which less than 2,000 af was agricultural use. South County total water for the past decade has ranged from about 42,000 af in the drought year 1989 to 56,000 af in 1997. In 1999, the South County water use was 54,000 af, of which 24,000 af was M&I water use. (SCVWD 2001)

The District's imported CVP deliveries come from the Tracy pumping plant located in the Southern Delta, through the Delta Mendota Canal to San Luis Reservoir, and through the San Felipe Project into Santa Clara County. The CVP is contracted to deliver 152,500 af/year (130,000 af/year for M&I needs and 22,500 af/year for agricultural needs). In an average year (based on the long term average – see below) CVP supplies are between 23 to 25 percent of the total available supply making it a vital part of the District's water deliver supplies.

		Wet	Long Term Average	Critically Dry Period	Single Dry Year
Local Supplies	Surface Water Yield	155,000	101,000	59,000	50,000
	Natural Groundwater Recharge	225,000	112,000	74,000	0
	Recycled Water	20,000	20,000	20,000	20,000
	Change in Storage	Adds to Storage	Adds to Storage	0 to 45,000 from Storage	0 to 300,000[7] from Storage
Imported Supplies	SWP	100,000	74,000	47,000	11,000
	CVP	152,500	125,000	110,000	55,500[8]
	Hetch-Hetchy[3]	76,000	63,800	52,900	36,900
	Additional Water Transfers or Recycled Water	0 to 50,000	0 to 50,000	0 to 50,000	0 to 50,000
	Water Banking	Adds to Storage	0	15,000 to 52,000 Withdrawal	8,200 to 31,500 Withdrawal
Total Available Supplies		**729,000 to 779,000**	**496,000 to 546,000**	**378,000 to 510,000**	**182,000 to 555,000**
2020 Water Demand		420,000 to 480,000	420,000 to 480,000	420,000 to 480,000	420,000 to 480,000

Figure 3-1 Santa Clara Average Water Supplies for the Hydrological Period (SCVWD 2001)

In addition to water supply shortages caused by drought, the District's ability to meet the needs of the County can also be impacted by catastrophic interruptions of water supply, including regional power outages, earthquakes, contamination, flooding, and other natural or man-made disasters. The District incorporates such concerns in the planning and operations of its facilities.

The District also maintains spare parts and the equipment necessary for emergency repairs to its pipelines and treatment plants. Spare sections of pipe ranging in size from 24" to 144" in diameter are stored locally to facilitate replacing damaged sections quickly.

The access road is located near the Tesquisquita Slough, which feeds into San Felipe Lake in northern San Benito County near the Santa Clara County border. Tesquisquita Slough is a realigned channel that flows through more than five miles of valley flatlands used for agriculture and grazing. It is a perennial waterway with low flow during much of the year, except during winter storms and early spring runoff when water levels and flow rates are higher. The channel bed is composed of mostly silt substrates.

San Felipe Lake is a shallow, turbid lake that is a natural sag pond formed by the Calaveras Fault zone. Two tributaries enter into San Felipe Lake from the east, Tesquisquita Slough from San Benito County (mentioned above) and Pacheco Creek from Santa Clara County. When full, the lake covers about 160 surface acres. Lake depth is approximately three to five feet. Historically, the lake would recede significantly during the summer and would dry up completely during some years. Pipelines through the causeway connect the lake to the pasture on the opposite side.

3.1.2 Environmental Consequences

No Action

Under the No Action alternative, the road repairs would not occur as planned. There would be no impacts to water bodies in the area. The No Action alternative could delay deliveries of surface water. Water supplies would be disrupted on a short-term. Water users would likely rely on other surface and groundwater resources temporarily. THE DISTRICT could impose emergency water conservation measures. The No Action alternative would not result in long-term or major changes in quality or quantity.

Proposed Action

The Proposed Action would not disrupt water supplies to customers. The construction activities would occur during the dry season when San Felipe Lake is low. Santa Clara Valley Water District or its contractor would be responsible for implementing the measures and best management practices to prevent migration of soils into San Felipe Lake. Spoil piles will reside on the existing roadway and be surrounded by erosion control fencing and the work will take place in the dry season so there would not be erosion related water quality impacts. Surface and ground water quality and quantity would not change.

Cumulative Effects

The Proposed Action does not increase or decrease water supplies. The repair of the existing road does not lead to additional construction or land disturbing activities that could cumulatively impact surface or groundwater resources.

3.2 Land Use

3.2.1 Affected Environment

The proposed project site is located in a flat valley at the base of the Diablo Range and at the southern border of the Santa Clara Valley (see Figure A-2). Project area lies between Highways 101, 152, and 156. The closest cities are Hollister and Gilroy. A natural, seasonal lake, variously called Soap Lake or San Felipe Lake, is just south of Highway 152 and is fed by Llagas Creek, Uvas Creek, Tesquisquita Slough and Pacheco Creek. Pacheco Creek, just northeast of the project area, supports an extensive sycamore riparian woodland.

The lake is surrounded by pastureland and agricultural fields that extend to the west and south. The southwest portion is a raised area known as the Flint Hills, which feature extensive grassland and scattered seasonal wetlands. Land in the area is privately owned.

Each year, more houses, especially large ranchettes, continue to claim open space in the region and more surface water is drawn for agriculture and the rapidly growing human population. The Nature Conservancy is exploring land acquisitions and conservation easements with some property owners in the area.

The proposed project site is an existing Reclamation owned graveled access road that is regularly used and maintained, and relatively free of vegetation (see Figure D-1). Vegetation in the surrounding area includes grasslands that are currently grazed by cattle. Most of the pastures have few or no trees; a few trees stand around San Felipe Lake. Riparian vegetation such as sedges and brushes (tulle), shrubs, and small stands of deciduous trees (willows) are found along the shores of the Tesquisquita Slough and around San Felipe Lake. Other vegetation, such as cattails and other marsh-like species are also found in the area.

The Calaveras fault is a right-lateral strike-slip fault that is part of the San Andreas system (the Pacific-North America plate boundary). Its southern creep rate of 10-12 mm/yr (1/2 inch) is just about as large as its slip rate of 12 mm/yr, most of the fault motion occurs as creep, reducing the chance and size of major earthquakes. The Calaveras fault branches from the San Andreas fault just south of Hollister; to the north it runs through Anderson reservoir, Calaveras reservoir, and through the San Ramon Valley (I-680) before dying out near Mt. Diablo. From Morgan Hill north, the Calaveras does not spend all of its motion on creep; instead, some of it builds up to produce magnitude 6-6.5 earthquakes like the 1984 Morgan Hill earthquake. (Fieldtrip 2007)

3.2.2 Environmental Consequences

No Action

Under the No Action alternative, road failure could occur that could prevent access to the SCC facilities. Contingency and emergency road repairs would likely be implemented when major repairs are needed to the SCC. Water supply deliveries could be delayed until the road is repaired or major facility repairs are completed. This interruption would be temporary and would not lead to long-term impacts to land use.

Proposed Action

The construction project includes Best Management Practices as described in Attachment B of the incorporated by reference EA. The Proposed Action will not interfere with current operations or obligations to deliver water to other users and therefore does not contribute to development, land conversion or negatively impact existing development. The repair of the road involves three sites where the slopes are failing. The existing telemetric lines will be temporarily re-located during construction. Dust control measures will be implemented. All excavation equipment, activities and material will be confined to the existing access road. The excavation material will be reused in compaction layers of backfill. Containment shall be provided in such a manner that accidental spill of fuel, contaminate sediments, or other hazardous materials shall not be able to enter the water or damage surrounding vegetation. Excavation spoil should not be allowed to enter, or be placed where it may later enter any water body. Sanitary facilities would be placed away from water bodies and removed when no longer necessary. Work and materials would be confined to the existing roadway and not on the slopes. The entire project involves less than one

acre of lands. The Proposed Action would not have an adverse effect on unique geological features such as wetlands, wild or scenic rivers, refuges, flood plains, rivers placed on the nationwide river inventory, or prime or unique farmlands.

The Proposed Action allows access to maintain and operate existing facilities that provide a source of water to the Santa Clara County. Maintaining and operating the existing facilities ensure water supplies continue to be delivered to support existing conditions. No land use changes would occur.

Cumulative Effects

The Proposed Action is a road repair project and does not involve construction of new roads or facilities. The Proposed Action does not change water supplies or deliveries and therefore does not contribute to development or land conversion. Therefore, the Proposed Action does not result in cumulative impacts to terrestrial resources.

3.3 Biological Resources

3.3.1 Affected Environment

Various wildlife species are found in the area surrounding the proposed project site, including the adjacent pastures. Mammals including field mice, fox, and coyote reside in the area. Amphibians and reptiles include turtles, salamanders, frogs and toads. Fish such as carp and catfish are common in San Felipe Lake, Miller Canal, Tesquisquita Slough, and the Pajaro River.

Several bird species use San Felipe Lake as a permanent or migratory habitat - blackbirds, kites, hawks, ducks, geese, sparrow, swallows, larks, pelicans, gulls, ravens and crows. However, the proposed project site does not presently support a significant movement corridor for local wildlife nor does it provide a critical or crucial landscape linkage between or among habitat patches for the regional movement of wildlife.

The following list was obtained on July 16, 2007, by accessing the U.S. Fish and Wildlife Database: http://www.fws.gov/pacific/sacramento/es/spp_lists/auto_list.cfm. The list is for the Tres Pinos Quad (FWS, 2006).

TABLE 7: FEDERAL STATUS SPECIES ON TRES PINOS QUAD LIST FOR SCC CFC ACCESS ROAD REPAIR

Common Name	***Species Name***	***Fed Status***	***ESA***	***Summary basis for ESA determination***
California tiger salamander, Central DPS	*Ambystoma californiense*	T	NE	Unlikely to be found in the project area
California tiger salamander – Critical Habitat		CH	NE	Minor and temporary changes do not change PCE in project areas long term
California red-legged frog	*Rana aurora draytonii*	T	NE	Unlikely to be found in the project area
California red-legged frog – Critical Habitat		CH	NE	Minor and temporary changes do not change PCE in project areas long term
San Joaquin kit fox	*Vulpes macrotis mutica*	E	NE	Unlikely to be found in the project area

Quads Containing Listed, Proposed or Candidate Species: Tres Pinos (385D)

Additionally three miles outside of the project action area and outside of the Tres Pinos Quad, a 2001 breeding record for Least Bell's Vireo (LBV) is recorded in the California Natural Diversity Datebase (CNDDB). (CNDDB 2006) LBV utilizing that area would be too distant to be affected by the project and a 2003 survey of the CFC found no suitable LBV habitat. (Rana Associates 2003)

Other sensitive species within the county or nearby quads discussed below. California condor (*Gymnogyps californianus*), conservancy fairy shrimp (*Branchinecta conservatio*), longhorn fairy shrimp (*B. longiantenna*), San Benito evening primrose (*Camissoinia benitensis*), tidewater goby (*Eucyclogobius newberryi*), vernal pool fairy shrimp (*B. lynchi*), vernal pool tadpole shrimp (*Lepidurus packardi*), and yellow-billed cuckoo (*Coccyzus americanus*) would not be directly affected by the proposed action because work is confined to a road which does not provide habitat for these species, and the work would not affect the adjacent wetland. The range of blunt-nosed leopard lizard (*Gambelia silus*), giant kangaroo rat (*Dipodomys ingens*), riparian woodrat (*Neotoma fuscipes riparia*) and San Joaquin Wooly threads (*Lembertia congdonii*) are outside the action area, so the project also would not directly affect these species. The bald eagle (*Haliaeetus leucocephalus*) and California least tern (*Sterna antillarum browni*) would not be affected by the project. The small area of earthen roadway is not suitable habitat for these species, and work will be done when they would not be in the vicinity.

The California least tern breeds in small scattered colonies in coastal wetlands from San Francisco Bay southward to Baja California and winters along the Pacific coast of southern Mexico and the Gulf of California (Least Tern 2006). The nearest active colonies are likely at San Francisco Bay, over 40 miles distant, so this species would not be affected by the project.

Ten occurrence records for California Tiger Salamander (CTS) exist from grasslands north and east of San Felipe Lake and north and east of State Highway 152, with the record nearest to a road repair site being approximately 1200 m away. The breeding site associated with each record is identified as a cattle pond (CNDDB 2006) and these also are believed to be more than 1200 m from the slides, located in the hilly grazing land north and east of State Highway 152.

Additionally, other breeding areas for CTS that are closer to the project and which could be sources for populating aestivation habitat on the causeway road are not readily apparent. Flooded pasture south of the lake seems suitable for CTS breeding, but the pasture is hydrologically connected to the lake via the causeway and hence is also subjected to predatory fish populations (Jae Abel, pers. Comm.). Surveys of wetlands at the CFC conducted before the SCC was dewatered in 2003 revealed no evidence of CTS (Rana Associates 2003).

The FWS proposed critical habitat for the CTS on August 10, 2005 (FWS 2005). CH Unit 12, San Felipe Unit, of the Santa Clara and San Benito Counties, encompasses lands around San Felipe Lake, including the CFC causeway road (FWS 2005). This unit includes 6,991 ac (2,829 ha) of habitat, all three Potential Critical Elements's (PCE) for CTS.

PCE's of CH for the Central population of the CTS are (1) Standing bodies of fresh water (including natural and manmade (*e.g.*, stock)) ponds, vernal pools, and other ephemeral or permanent water bodies which typically support inundation during winter rains and hold water for a minimum of 12 weeks in a year of average rainfall. (2) Upland habitats adjacent and accessible to and from breeding ponds that contain small mammal burrows or other underground habitat that CTS depend upon for food, shelter, and protection from the elements and predation. (3) Accessible upland dispersal habitat between occupied locations that allow for movement between such sites (FWS 2006).

The threatened California Red Legged Frog (CRLF) breeds in coastal lagoons, marshes, springs, permanent and semipermanent natural ponds, ponded and backwater portions of streams, as well as artificial impoundments such as cattle ponds, irrigation ponds, and siltation ponds (FWS 1997). California red-legged frogs may venture from aquatic sites as much as 1.6 km (one mile) (FWS 1997) and rodent burrows can be used between overland movements or during aestivation (Red Legged Frog 2006). CRLF are more prevalent in wetlands lacking predators; fish may eat them and they may compete with, and be eaten or displaced by bullfrogs (*Rana catesbeiana*).

The nearest occurrence record for CRLF is from grassland approximately 2 miles south of the project area. Three other records for CRLF exist within approximately 5 miles of the project area, lying to the west, northeast and east (Figure 1). A survey conducted at wetlands at the CFC before the SCC was dewatered in 2003 did not detect CRLF (Rana Associates 2003). Predators and may limit the suitability of the wetlands adjacent to the project for CRLF. San Felipe Lake contains significant populations of predaceous fish (Smith 2005) and a bullfrog was recently observed at a borrow area at the base of the CFC causeway road (J. Abel, pers. Comm.).

The endangered San Joaquin kit fox (SJKF) inhabit grasslands and scrub-shrub habitat and exploit burrows for shelter throughout the year. The range of SJKF comes within approximately 2 miles of the project area, lying primarily to the south and east. SJKF can travel widely, and individuals in the historical range could access the project area. A survey for signs of SJKF at the CFC in 2003 was conducted and this survey did not reveal evidence of SJKF in the area (Rana Associates 2003). A recent survey for burrows at the CFC identified rodent burrows in the CFC area which could be enlarged and exploited by SJKF, but there are no recent records for SJKF within 10 miles of the causeway road and these burrows are unlikely to be used by SJKF. Nevertheless, a survey will be conducted before work is begun to determine if there is any SJKF sign present in the project area. If SJKF sign is present, no work will be initiated without further consultation with FWS. Because avoidance and minimization measures will be taken for this species, the proposed action is highly unlikely to adversely affect SJKF.

3.3.2 Environmental Consequences

No Action

Under the No Action alternative, road repair activities would not occur and access to the facilities would be limited or severed. Disturbances to biological resources might occur if emergency repairs were required for health and safety needs resulting in work in wetlands or other sensitive environments without adequate biologist oversight or mitigation measures.

Proposed Action

The proposed project area contains potentially sensitive environments and a qualified biologist (e.g. a biologist knowledgeable of the identification and ecology of sensitive species that could occur in the area and critical habitat) will perform a pre-construction survey within 7 days prior to initiation of project ground disturbing activities to inspect the action area for the presence of listed species. If the survey reveals the presence of a listed species in the action area, consultation with U.S. Fish and Wildlife Service (FWS) is required before the project would proceed. Additional avoidance and minimization measures include training on endangered species and critical habitat for workers. Additionally, the biologist will be present during ground-disturbing activities and shall have the authority to halt work on the project if a listed species is observed at the site, or if project activities would adversely affect a listed species. If a work stoppage occurs, District staff biologists, Reclamation and FWS shall be notified within one work-day and work shall not resume until appropriate consultation is completed with Service.

Additionally, the District proposes to implement the following protection measures to ensure that the proposed project will not adversely affect the San Joaquin kit fox, California red-legged frog, California tiger salamander, and western burrowing owl:

1. Implement the District's Best Management Practices (Appendix C), where appropriate.

2. Conduct pre-activity surveys for California tiger salamanders, California red-legged frogs, San Joaquin kit fox and burrowing owls within one week prior to the commencement of proposed project activities. A qualified biologist will conduct surveys by observing habitat conditions and looking for the species and signs of their occurrence:

    a. If California tiger salamanders or California red-legged frog adults or tadpoles are found within the project area, the proposed project will be halted until Reclamation and the District coordinate with California Department of Fish and Game and the FWS.

    b. FWS's Dissemination of Standard Recommendations for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance (Service 1999) will be implemented.

    c. The active work site, including material stockpiles will be inspected by a biologist each morning before work crews begin work.

    d. The survey area will be canvassed for evidence of active burrows within 100 feet of each activity area (excavation sites, stockpiling areas and levee berm). Potential burrowing areas will be flagged and an exclusion zone will be established.

3. Silt fencing will be placed around material stockpiling areas and along the toe of the slope of the levee to prevent sidecast material from dispersing onto native ground and avoid off-road impacts.

4. Biologists will conduct a training session for all District and contract personnel. Training materials developed for the San Felipe Preventative Maintenance Shutdown Project in 2003

will be used. The program will provide information about the sensitive species in the area, including: 1) a description of each of the sensitive species and their habitat needs; 2) an explanation of the status of the species and its protection under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.); and 3) a discussion of the protection measures that will be implemented to reduce impacts to the species during project construction and implementation. Additionally, a fact sheet conveying this information will be distributed to the above-mentioned people and anyone else who may enter the action area.

5. Project-related vehicles will observe a 15-mph speed limit in all project areas. Night-time construction will be avoided.

6. All excavated, steep-walled holes or trenches more than two feet deep will be covered by plywood at the end of each working day. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals.

7. All project-related activities will take place on engineered ground; no natural or naturalized ground surfaces will be disturbed.

8. All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in closed containers and removed at least one a week from the project site.

9. The District will identify an employee to serve as the point of contact in the unlikely event that any State or Federally listed species (San Joaquin kit fox, California red-legged frog, California tiger salamander, or western burrowing owl) are observed at the work site by a work crew member.

10. If any listed species or their sign is observed in the project area, work will be halted immediately. The local offices of Reclamation, FWS and CDFG will be notified of the observation within one day and no further work will be conducted until consultation with FWS and CDFG has been completed.

Additionally, to avoid potential impacts to burrowing owls, the proposed project would occur during the dry season, when it can be certain that project activities will not result in any potentially significant impacts. A District biologist will confirm absence of burrowing owls and other migratory birds by conducting surveys prior to the start of project activities. The proposed project must not begin before August 15th or before a District biologist clears the site in order to avoid potential environmental impacts associated with sensitive species and the Migratory Bird Treaty Act.

Project Effects to Critical Habitat

Critical habitat (CH) designated for California red-legged frog, conservancy fairy shrimp, Least Bell's vireo, longhorn fairy shrimp, tidewater goby, vernal pool fairy shrimp, and vernal pool tadpole shrimp does not exist within the action area, therefore the project would not directly or indirectly affect designated critical habitat for these species.

The SCC CFC causeway road is within CH for CTS. Repair of the slides will remove a small amount of space within CH at the three slide areas. Repair also could potentially disturb a

portion of one ground squirrel burrow. The effect of the removal of a small amount of space at slides, and the possible disturbance to a portion of one rodent burrow would be insignificant to CTS and would not likely affect its conservation and recovery, as other similar refugia exist close by. Overall, the minimal effects to the underground spaces, including those potentially to a portion of one rodent burrow at this project location, are considered insignificant to the conservation and recovery of CTS.

Reclamation has determined the Proposed Action would not likely adversely affect listed threatened and endangered species or their federally designated habitat. This determination is based on implementing the environmental commitments within the project, the short-term duration (two weeks) of construction activities, work would be conducted in the dry season, pre-construction biological surveys would be conducted by a qualified biologist prior to construction, work would be confined to the existing road and a qualified biologist will be present during ground disturbing construction. If threatened and endangered species are found, work would cease and the Service would be notified for further consultations.

Cumulative Effects

Cumulative effects include the effects of future State, Tribal, local or private actions that are reasonably certain to occur in the Action Area. There are no known State, Tribal, local or private actions reasonably certain to occur in the action area that would affect listed species. State, Tribal, local or private actions may occur sometime in the future within CH unit 12. Road development, urban expansion, or changes in land use from pastoral to agricultural uses seem most likely and could occur on private lands. Consultation on such actions would be completed if a federal nexus existed for those actions. The Santa Clara Valley Water District makes routine trips across this road to conduct operations and maintenance to the facilities. The Proposed Action allows continued access and does not lead to other actions or cumulative impacts to biological resources.

3.4 Cultural Resources

3.4.1 Affected Environment

Cultural Resources is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties. The San Joaquin Valley is rich in historical and pre-historic cultural resources. Cultural resources in this area are generally prehistoric in nature and include remnants of native human populations that existed before European settlement. Prior to the 18th Century, many Native American tribes inhabited the Central Valley. It is possible that many cultural resources lie undiscovered across the valley. The San Joaquin Valley supported extensive populations of Native Americans, principally the Northern Valley Yokuts, in the prehistoric period. Cultural studies in the San Joaquin Valley have been limited. The conversion of land and intensive farming practices over the last century has probably destroyed many Native American cultural sites (Bureau of Reclamation 2006).

3.4.2 Environmental Consequences

No Action

No construction activities would occur under the No Action alternative. No historic properties will be affected by this action.

Proposed Action
Since cultural resources are unlikely to occur at the project site, and this site has been disturbed in the past, the Proposed Action would not result in major impacts to cultural resources. No historic properties will be affected by this action.

Cumulative Impacts
The Proposed Action does not result in increased trips, disturbances to cultural resources, nor lead to cumulative impacts to these resources.

3.5 Indian Trust Assets

3.5.1 Affected Environment

Indian trust assets (ITAs) are legal interests in assets that are held in trust by the U.S. Government for federally recognized Indian tribes or individual Indians. The trust relationship usually stems from a treaty, executive order, or act of Congress. The Secretary of the Interior is the trustee for the United States on behalf of federally recognized Indian tribes. "Assets" are anything owned that holds monetary value. "Legal interests" means there is a property interest for which there is a legal remedy, such a compensation or injunction, if there is improper interference. Assets can be real property, physical assets, or intangible property rights, such as a lease, or right to use something. ITAs cannot be sold, leased or otherwise alienated without United States' approval. ITAs may include lands, minerals, and natural resources, as well as hunting, fishing, and water rights. Indian reservations, rancherias, and public domain allotments are examples of lands that are often considered trust assets. In some cases, ITAs may be located off trust land.

Reclamation shares the Indian trust responsibility with all other agencies of the Executive Branch to protect and maintain ITAs reserved by Indian tribes, or individual Indians by treaty, statute, or Executive Order.

No Indian Trust Assets occur at the project site.

3.5.2 Environmental Consequences

No Action
Under the No Action Alternative, water supplies could be interrupted to customers in Santa Clara County including Indian Casinos and reservations. These interruptions would be temporary or an alternate source of water would be used. Major impacts to Indian Trust Resources would not occur. Alternative sources of water could be used to meet demands temporarily until access is allowed to maintain the water supply facilities. The No Action alternative does not interfere with Indian water rights or other assets.

Proposed Action
The Proposed Action would not disturb or interfere with Indian Trust resources because none occur within the project area. Under the Proposed Action, water supplies would not be interrupted to customers in Santa Clara County including Indian Casinos and reservations.

Cumulative Impacts

The Proposed Action does not result in interruption of water supplies to Indian Casinos, reservations or other Native American assets and therefore has no impact on Indian Trust Assets, the action would not lead to cumulative impacts to these resources.

3.6 Socioeconomic Resources

3.6.1 Affected Environment

Santa Clara County ranks fourth in the state in terms of population and jobs. The Santa Clara Conduit provides vital water supplies to this thriving economy. Operating and maintaining the facilities is critical to providing this water supply. The access road is a part of the water supply facilities. The access road is included in the facilities in the operations and maintenance agreement between the District and Reclamation.

The County is home to a very dynamic economy and 1.7 million people. Urbanization has replaced the orchards of North County over the past several decades, while agriculture remains an important part of the South County area. The County's economy is a key element in the Northern California Bay Area, providing approximately 30 percent of all the jobs in the region. Nicknamed "Silicon Valley," with about one of every five of the County's jobs in high technology, the area continues to attract fast growth industries. (SCVWD 2001)

Growth in the County is expected to continue, although at slower rates than in the past. The estimated total population in 2000 was 1,737,000. The Association of Bay Area Governments (ABAG) projects that this will rise to 1,930,700 by the year 2020, compared to 1,497,577 in 1990**,** a 29 percent increase.

The recession of the early 1990s hit Santa Clara County hard. Between July 1990 and August 1993, the County lost about 54,000 jobs. By 1994, the number of jobs began to grow again, eventually exceeding the previous peak. ABAG projects that the number of jobs in 2020 will

reach 1,230,760 compared to 852,080 jobs in 1990, a 44 percent increase. According to ABAG,

Figure 4-1 Santa Clara County Demographics from ABAG Projections 98

	1990	1995	2000	2005	2010	2015	2020
Jobs	852,080	827,350	1,013,360	1,077,440	1,141,380	1,185,220	1,230,760
Population	1,497,577	1,599,100	1,739,800	1,809,500	1,864,300	1,901,100	1,930,700
Persons Per Household	2.81	2.90	3.01	2.99	2.95	2.93	2.91
Households	520,180	538,900	565,730	592,690	619,430	636,430	651,040
Employed Residents	812,345	809,300	897,100	952,200	988,900	1,027,600	1,059,200
Mean Household Income	$70,262	$73,800	$83,300	$88,700	$94,400	$100,000	$106,800

the long-term trend for the County's economy is expected to be less volatile than in recent years. The network computing industry is expected to become more stable as it grows, and will help diversify the high technology sectors. Strong growth is expected in both the manufacturing and service sectors.

Although the County is adding new households, from 520,180 in 1990 to a projected 651,040 by 2020**,** a 25 percent increase, the rate of household growth will be outpaced by population growth and especially by job growth. The persons per unit is expected to continue to be higher than the historical average, and an increasing number of those employed here will not be residents of the County. This job/housing imbalance is expected to keep housing costs in the area among the highest in the nation.

3.6.2 Environmental Consequences

No Action

The No Action alternative would not result in major changes to socio-economical conditions. The road needs repair in order to allow the continued access to the critical water supply facilities. Emergency and contingency repairs would likely be performed in the event of road failure that disrupted required access. The District has access to State Water Project water and groundwater. Water supplies would continue to be delivered to customers whether or not Reclamation approves the road repair project as planned. If the conduit failed, emergency repair measures would be instituted. The District could implement emergency water conservation measures temporarily to deal with the 25 percent reduction in supplies.

Proposed Action
The Proposed Action allows the continued access to the vital water supply facilities for Santa Clara County. Water supplies and deliveries to customers would not be interrupted. The Proposed Action would not result in changes in the socio-economical conditions.

Cumulative Impacts
The Proposed Action would not increase or decrease water supplies that could impact socio-economical conditions. Therefore, the Proposed Action does not result in cumulative impacts to socio-economical conditions

3.7 Environmental Justice

3.7.1 Affected Environment

Executive Order 12898, dated February 11, 1994, requires Federal agencies to ensure that their actions do not disproportionately impact minority and disadvantaged populations.

3.7.2 Environmental Consequences

No Action
Landscaping and gardening jobs are typically filled by minority population groups. If there was disruption to the delivery of CVP water into the District, it is likely the District would rely on another source of water to meet its customer's demands until the conduit failure could be ameliorated. This would have no disproportionate effect on minority or disadvantaged populations.

Proposed Action
The Proposed Action would continue the status quo. Repair of the existing access road would not cause dislocation, changes in employment, or increase flood, drought, or disease. The Proposed Action would not disproportionately impact economically disadvantaged or minority populations. There would be no changes to existing conditions. Employment opportunities for low-income wage earners and minority population groups would be within historical conditions. Disadvantaged populations would not be subject to disproportionate impacts.

Cumulative Impacts
The Proposed Action would not increase or decrease water supplies that would impact minority or disadvantaged populations. Therefore, the Proposed Action does not result in cumulative impacts to these populations.

Section 4 Consultation and Coordination

4.1 Fish and Wildlife Coordination Act (16 USC 651 et seq.)

The Fish and Wildlife Coordination Act requires that Reclamation consult with fish and wildlife agencies (federal and state) on all water development projects that could affect biological resources. The implementation of the CVPIA, of which this action is a part, has been jointly analyzed by Reclamation and the FWS and is being jointly implemented. The Proposed Action does not involve a water development related construction project. Therefore the FWCA does not apply.

4.2 Endangered Species Act (16 USC 1521 et seq.)

Section 7 of the Endangered Species Act requires Federal agencies, in consultation with the Secretary of the Interior, to ensure that their actions do not jeopardize the continued existence of endangered or threatened species, or result in the destruction or adverse modification of the critical habitat of these species. Reclamation has determined the Proposed Action would not likely adversely affect listed threatened and endangered species or their federally designated habitat. This determination is based on the discussion in Section 3 of this EA. Reclamation is informally consulting with FWS on the Proposed Action. The final EA, FONSI and approvals are contingent upon conclusions of the consultations. The Proposed Action would not result in impacts to species under jurisdiction of the National Oceanic Atmospheric Administration and no consultation is required.

4.3 National Historic Preservation Act (15 USC 470 et seq.)

Section 106 of the National Historic Preservation Act requires federal agencies to evaluate the effects of federal undertakings on historical, archaeological and cultural resources. Due to the nature of the proposed project, there will be no effect on any historical, archaeological or cultural resources, and no further compliance actions are required.

4.4 Migratory Bird Treaty Act (16 USC Sec. 703 et seq.)

The Migratory Bird Treaty Act implements various treaties and conventions between the U.S. and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. Unless permitted by regulations, the Act provides that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. Subject to limitations in the Act, the Secretary of the Interior (Secretary) may adopt regulations determining the extent to which, if at all, hunting, taking, capturing, killing, possessing, selling, purchasing, shipping, transporting or exporting of any migratory bird, part, nest or egg will be allowed, having regard for temperature zones, distribution, abundance, economic value, breeding habits and migratory flight patterns.

The Proposed Action would have no effect on birds protected by the Migratory Bird Treaty Act.

In order to comply with the Migratory Bird Treaty Act, migratory bird surveys will be performed prior to any project-related activity that could pose the potential to affect migratory birds. Affected areas will be inspected/monitored prior to commencement of the nesting season, and as frequently as necessary thereafter, to provide deterrence measures and prevent nesting by birds. Inactive bird nests may be removed, with the exception of raptor nests.

1. During the nesting season, all project areas that may be impacted, including all vegetation and grounds will be inspected with sufficient frequency as needed, to identify any new and partially-built nests.

2. No birds, nests with eggs, or nests with hatchlings shall be disturbed.

Vegetation can be cleared and maintained to prevent migratory bird nesting. All necessary vegetation clearing will be performed prior to the nesting season, if at all possible. No vegetation will be trimmed back unnecessarily, including trees and/or shrubs growing near the right of way, which overhang onto the work site.

Nesting exclusion devices may be installed to prevent potential establishment or occurrence of nests in areas where construction activities would occur. All nesting exclusion devices will be maintained throughout the nesting season or until completion of work in an area makes the devices unnecessary. All exclusion devices will be removed and disposed of when work in the area is complete.

4.5 Executive Order 11988 – Floodplain Management and Executive Order 11990-Protection of Wetlands

Executive Order 11988 requires Federal agencies to prepare floodplain assessments for actions located within or affecting flood plains, and similarly, Executive Order 11990 places similar requirements for actions in wetlands. The project would not affect either concern.
The Proposed Action is confined to the existing road. Wetlands would be avoided. The Proposed Action is consistent with the Executive Order to protect the nation's wetlands.

Section 5 List of Preparers and Reviewers

United States Bureau of Reclamation Staff:
Judi Tapia, Natural Resource Specialist, SCCAO

Lynne Silva, Environmental Protection Specialist, SCCAO

Ned Gruenhagen, PhD, Wildlife Biologist, SCCAO

Lee Yates, Civil Engineering Technician, TO

Patrick Welch, Archeologist, MP

Frank Perniciaro, Native American Affairs, MP

Santa Clara Valley Water District Staff:
Susan Fizzell, Environmental Planner

Dave Matthews, Environmental Planner

Jae Abel, Biologist

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Appendix A

Access Road Site Photos

Figure A-1: Access road to proposed project site.

Figure A-2: Road failure #1.

Figure A-3: Road failure #2.

Figure A-4: Road failure #2.

Figure A-5: Road failure #3.

Appendix B

CEQA Compliance

NOTICE OF EXEMPTION

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3686
Telephone (408) 265 2600

To:	Santa Clara County Clerks Office, Business Division 70 West Hedding Street San Jose, CA 95110	**From:**	Santa Clara Valley Water District 5750 Almaden Expressway San Jose, CA 95118-3686

Project Title: Santa Clara Conduit Calaveras Fault Crossing Access Road Repair Project

Project Location – Specific: Three sites on the Calaveras Fault Crossing access road, just east of Calaveras Fault Outlet - Vault #15 (see Figure A-3) on United States Bureau of Reclamation-owned property.

Project Location – City: Unincorporated San Benito County (see Figure A-1 and A-2).

Project Location – County: San Benito (see Figure A-1 and A-2).

Project Purpose: The purpose of the proposed project is to maintain the width and functionality of the access road by repairing three road failures that are undermining its north slope.

Name of Public Agency Approving Project: Santa Clara Valley Water District

Name of Agency or Person Carrying Out Project: Santa Clara Valley Water District

Exempt Status: (*check one*)

☐ Ministerial [Sec. 21080(b)(1); 15268]

☐ Declared Emergency [Sec. 21080(b)(3); 15269(a)];
☐ Emergency Project [Sec. 21080(b)(c)]
☒ Categorical Exemption, Section 15301, Class 1, "Existing Facilities"
☐ Statutory Exemption, Public Resources Code § 21080.21

Reasons Why Project is Exempt:

This project is routine maintenance on an existing access road. Given the nature of the proposed work (maintenance), the location (an existing facility), and the temporary, short-term duration of the work, this project will have no significant effect on the environment.

None of the conditions noted under California Environmental Quality Act (CEQA) Guidelines 15300.2 (as revised) will occur. The project qualifies for a Categorical Exemption under CEQA Guidelines Section 15301.

CEQA Guidelines Section 15301, Existing Conditions, Class 1 consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination. The type of existing facility that most closely applies to this project is example (b), which says - "Existing facilities of both investor and publicly-owned utilities used to provide electric power, natural gas, sewerage, or other public utility services".

Description of Project:

The proposed project consists of the repair of three slope failures on the north side of the access road causeway (see red dots in Figure A-3); Appendix C contains the conceptual design drawing of the repair. The intent of the design is to maintain the road width, unload the failing portion of the existing north slope, and prevent the existing slope failures from progressing. The length of each repair is expected to be less than 50 feet. The total volume of excavation and backfill for the three sites is estimated to be 400 to 600 cubic yards.

This project proposes the installation of Geofoam blocks beneath the crest of the roadway (see Appendix C). Geofoam is made from cellular plastic material and is produced in block form; it is very lightweight and has a high strength-to-density ratio.

The upper four to six feet of the levee crown in the area of the existing slope failures will be excavated. All excavation equipment will be confined to the existing access road. The excavated material will be stockpiled on the roadway and reused. Geofoam blocks will be installed at the head of the slide to reduce the driving force of the slide mass and build up the original road grade. The Geofoam will be covered with approximately three feet of backfill, the repaired areas will be re-compacted, and the all-weather gravel road surface will be restored.

The excavation required for the road repairs will interrupt the existing direct-buried telemetry cable lines. To ensure continuous communication while the road is being repaired, two new splice boxes will be permanently installed one foot below the road surface on either side of the construction area. A temporary telemetry cable in two-inch diameter PVC conduit will be

installed on the south side of the roadway between the new splice boxes. After road repairs are complete, a new cable trench will be excavated in the road surface between the two new splice boxes, a distance of approximately 900 feet. A new, permanent, two-inch diameter PVC conduit will be installed in the trench, the trench will be back-filled and a new permanent cable will be pulled through the conduit. The temporary cable will be disconnected and the new cable reconnected. The existing cable will be abandoned in-place or removed.

Equipment such as crew trucks, a backhoe, an excavator, a trencher, a compactor, small tampers and a loader will be on site to complete the project. The proposed project will occur on land owned by the Bureau under an agreement with the District that states the District will maintain this water conveyance system. The area is undeveloped and there are no other structures or facilities in close proximity.

The proposed project site on the existing private access road can be accessed by Shore Road, off of Route 25, which runs east of Highway 101, south of Gilroy. This access route is indicated with a blue dashed line in Figure A-2. An upland area adjacent to the access road, near CFO Vault #15 (see Figure A-3), will be used as the project staging area; no traffic control permits are required.

The proposed project will take approximately two weeks to complete and is scheduled to take place during the dry season in late summer/early fall. The proposed project must occur within an eleven week window – August 15th through October 31st – determined by the close of the burrowing owl nesting season and the onset of the rainy season. The proposed project must not begin before August 15th or before a District biologist clears the site in order to avoid potential environmental impacts associated with sensitive species and the Migratory Bird Treaty Act. All project-related activities will occur during the work week, during normal business hours.

The project incorporates Best Management Practices (BMPs) as described in Appendix B. Although the project is exempt from CEQA and the District has concluded that none of the potentially significant impacts noted under CEQA Guidelines Section 15300.2 will occur, the District practice of incorporating BMPs into projects ensures protection of natural resources.

Lead Agency: Santa Clara Valley Water District

Contact Person: Susan Fizzell, Environmental Planner

Area Code/Telephone/Extension: (408) 265-2607 x2946

Signature: _____ Date: _____

Title: Stan M. Williams
Chief Executive Officer

Date received for filing at County of Santa Clara Clerk's Office: _____

Appendix C
Best Management Practices The District Will Follow

While analysis has shown that the proposed project is categorically exempt and there is minimal potential for impact, it is standard District practice to incorporate Best Management Practices (BMPs) into all projects to avoid potential environmental impacts. The following BMPs apply to the proposed project.

AIR QUALITY		
AQ-1	***Bay Area Air Quality Management District Basic Dust Control Measures (all construction sites)***	Implement Bay Area Air Quality Management District (BAAQMD) Basic Control Measures for construction emissions of PM_{10} at all construction sites. Current measures stipulated by the BAAQMD CEQA Guidelines include the following (BAAQMD 1999): 1. Active areas shall be watered at least twice per day unless soils are already sufficiently moist to avoid dust. The amount of water must be controlled so that runoff from the site does not occur, yet dust control is achieved. 2. Unpaved access roads, parking areas and staging areas at construction sites shall be paved, watered three times daily, or non-toxic soil stabilizers shall be applied to control dust generation. 3. Paved public streets shall be swept (with water sweepers) if visible soil material is carried onto adjacent paved surfaces. 4. Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph. 5. All equipment shall be maintained in industry standard operating condition. Run engines for the minimum amount of time necessary to complete the work. *Source: BAAQMD CEQA Guidelines*
AQ-4	***6.2 Avoid Stockpiling Potentially Odorous Sediments***	Some excavation sites will have sediment that is rich in organic matter decaying in an anaerobic condition, which generates assorted malodorous gases, such as reduced sulfur compounds. These materials shall be handled in a manner that avoids impacting sensitive receptors. 1. Avoid stockpiling potentially odorous materials within 1,000 feet of residential areas or other odor sensitive land uses. 2. Where appropriate, odorous stockpiles shall be disposed of at an appropriate landfill. *Source: SMP Provision No. 5.3*

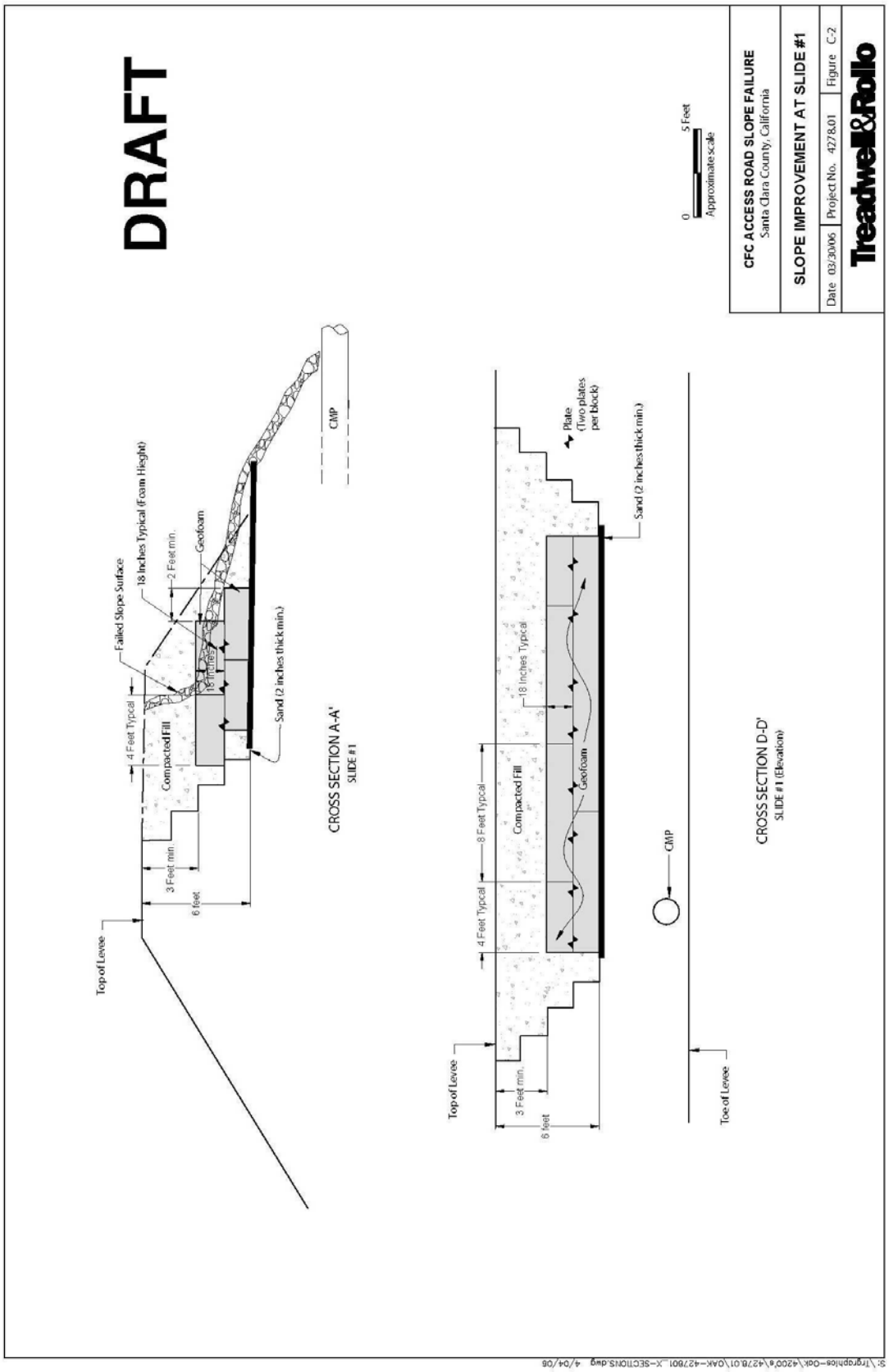
BIOLOGICAL RESOURCES		
BI-11	**Migratory Bird Surveys**	Migratory bird surveys will be performed prior to any project-related activity that could pose the potential to affect migratory birds. Affected areas will be inspected/monitored prior to commencement of the nesting season, and as frequently as necessary thereafter, to provide deterrence measures and prevent nesting by birds. Inactive bird nests may be removed, with the exception of raptor nests. 3. During the nesting season, all project areas that may be impacted, including all vegetation and grounds will be inspected with sufficient frequency as needed, to identify any new and partially-built nests. *4.* No birds, nests with eggs, or nests with hatchlings shall be disturbed. *Source: Special Provisions Guidelines 13.15.01*
BI-12	***6.3 Migratory Bird Nesting Prevention - Vegetation Clearing***	Vegetation can be cleared and maintained to prevent migratory bird nesting. All necessary vegetation clearing will be performed prior to the nesting season, if at all possible. No vegetation will be trimmed back unnecessarily, including trees and/or shrubs growing near the right of way, which overhang onto the work site. *Source: Special Provisions Guidelines 13.15.01*
BI-13	***4 Migratory Bird Nesting Exclusion Devices***	Nesting exclusion devices may be installed to prevent potential establishment or occurrence of nests in areas where construction activities would occur. All nesting exclusion devices will be maintained throughout the nesting season, or until completion of work in an area makes the devices unnecessary. All exclusion devices will be removed and disposed of when work in the area is complete. *Source: Special Provisions Guidelines 13.15.01*
HAZARDS AND HAZARDOUS MATERIALS		
HM-9	***6.5 Vehicle and Equipment Cleaning***	District vehicles shall be washed only at the approved area in the corporation yard. No washing of District or contractor vehicles shall occur at job sites. *Source: SMP Provision No. 4.5*
HM-10	***6.6 Vehicle and Equipment Fueling***	No fueling shall be done in or around the proposed project area, unless equipment stationed in these locations is not readily relocated. 1. For stationary equipment that must be fueled on-site, containment shall be provided in such a manner that any accidental spill of fuel shall not be able to enter the water or contaminate sediments that may come in contact with water. 2. Any equipment that is readily moved shall not be fueled in the immediate area. 3. All fueling done at the job site shall provide containment to the degree that any spill shall be unable to enter waterways or damage surrounding vegetation. *Source: SMP Provision No. 6.4*

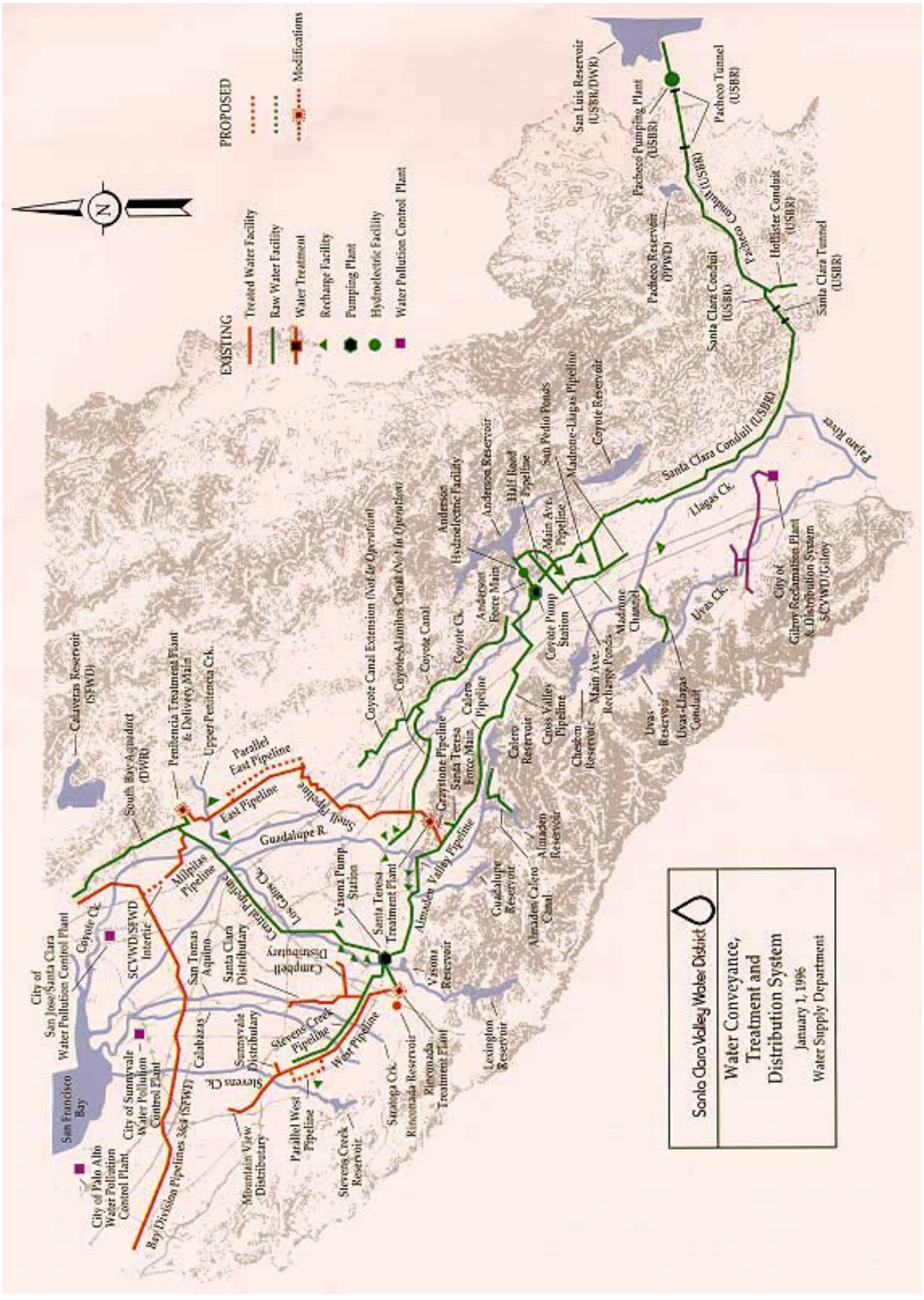
HAZARDS AND HAZARDOUS MATERIALS (CONT.)		
HM-11	***6.7 Vehicle and Equipment Maintenance***	No equipment servicing shall be done in or around the proposed project area, unless equipment stationed in these locations cannot be readily relocated. 1. Any equipment that can be readily moved shall not be serviced in the immediate area. 2. All servicing of equipment done at the job site shall provide containment to the degree that any spill shall be unable to enter any waterway or damage surrounding vegetation. 3. If emergency repairs are required in the field, only those repairs necessary to move equipment to a more secure location shall be done in a surrounding area. 4. If emergency repairs are required, containment shall be provided equivalent to that done for fueling or servicing. 5. Any oily or greasy substances or other materials that may degrade surface or groundwater quality shall not be allowed to enter any surface water. 6. Replacement of engine fluids, when necessary, will be done outside of the channel area. Fluids will be collected in drip pans, stored in appropriate containers, and properly recycled or disposed of offsite. 7. All equipment fluids shall be stored in a secure area away from the channel. Quantities greater than 55 gallons will be provided with a secondary containment capable of containing 110 percent of the primary container. During the period between October 15 and April 15, all equipment fluid storage areas will be provided with an impermeable cover to prevent contact with storm water.
		Source: SMP Provision No. 6.5
HM-12	***6.8 Hazardous Materials Management***	Measures shall be implemented to ensure that hazardous materials are properly handled and the quality of water resources is protected by all reasonable means. 1. Prior to entering the work site, all field personnel shall know how to respond when toxic materials are discovered. 2. The discharge of any hazardous or non-hazardous waste as defined in Division 2, Subdivision 1, Chapter 2 of the California Code of Regulations shall be conducted in accordance with applicable State and federal regulations.
		Source: SMP Provision No. 6.3
HM-13	***6.9 Spill Prevention***	Prevent the accidental release of chemicals, fuels, lubricants, and non-storm drainage water. 1. Field personnel shall be appropriately trained in spill prevention, hazardous material control, and clean-up of accidental spills. 2. No fueling, repair, cleaning, maintenance, or vehicle washing shall be performed in a waterway or surrounding area.
		Source: SMP Provision No. 6.1

HAZARDS AND HAZARDOUS MATERIALS (CONT.)		
HM-14	***6.10 Spill Kit Location***	Spill prevention kits shall always be in close proximity when using hazardous materials (e.g., crew trucks and other logical locations). 1. Prior to entering the work site, all field personnel shall know the location of spill kits on crew trucks and at other locations within District facilities. 2. All field personnel shall be advised of these locations and trained in their appropriate use. *Source: SMP Provision No. 6.2*
HYDROLOGY AND WATER QUALITY		
WQ-5	***.1 Soil Stockpiles***	Excavation spoil should not be allowed to enter, or be placed where it may later enter any reservoir, river, creek, stream, or other water body. This includes entry into storm drains. *Source: SMP Provision No. 1.9*
WQ-6	***6.12 Stabilized Construction Entrance***	Measures shall be implemented to minimize soil from being tracked onto streets near work sites. Methods used to prevent mud from being tracked out of work sites onto roadways include installing a layer of geotextile mat, followed by a 4-inch thick layer of 1 to 3-inch diameter gravel on unsurfaced access roads. *Source: SMP Provision No. 4.3*
NOISE		
NO-1	***6.13 Noise Pollution***	Noise pollution due to construction activities will be kept as low as possible. In no case shall noise levels exceed the maximums of the local jurisdiction requirements. *Source: Water Supply Division No. 15.02*
NO-2	***6.14 Residential Noise Management***	The District will implement practices that minimize disturbances to residential neighborhoods surrounding work sites. 1. In general, work will be conducted during normal working hours. Extending weekday hours and working weekends may be necessary to complete some projects. 2. Internal combustion engines will be equipped with adequate mufflers. 3. Excessive idling of vehicles will be prohibited. 4. All construction equipment will be equipped with manufacturer's standard noise control devices. *Source: SMP Provision No. 4.2*
UTILITIES AND SERVICE SYSTEMS		
UT-1	***6.15 Sanitary/Septic Waste Management***	Temporary sanitary facilities shall be located on jobs that last multiple days. All temporary sanitary facilities shall be placed outside of the creek channel and flood plain and removed when no longer necessary. *Source: SMP Provision No. 4.4*

UTILITIES AND SERVICE SYSTEMS (CONT.)		
UT-2	***6.16 Work Site Solid Waste Management***	Field personnel shall clean the work site before leaving by removing all litter and construction related materials. Maintenance crews shall be responsible for all debris incurred as a result of construction and for cleaning up dumped material.
		Source: SMP Provision No. 4.6

Appendix D – Conceptual Design




Santa Clara Valley Water District
Water Conveyance, Treatment and Distribution System
January 1, 1996
Water Supply Department
EXISTING
Treated Water Facility
Raw Water Facility
Water Treatment
Recharge Facility
Pumping Plant
Hydroelectric Facility
Water Pollution Control Plant
PROPOSED
Modifications
San Francisco Bay
City of Palo Alto Water Pollution Control Plant
Bay Division Pipelines 3&4 (SFWD)
City of Sunnyvale Water Pollution Control Plant
City of San Jose/Santa Clara Water Pollution Control Plant
Coyote Ck.
SCVWD/SFWD Intertie
Calabazas
San Tomas Aquino
Santa Clara Distributary
Sunnyvale Distributary
Campbell Distributary
Central Pipeline
Los Gatos Ck.
Stevens Ck.
Mountain View Distributary
Stevens Creek Pipeline
West Pipeline
Parallel West Pipeline
Stevens Creek Reservoir
Saratoga Ck.
Rinconada Reservoir
Rinconada Treatment Plant
Lexington Reservoir
Vasona Reservoir
Vasona Pump Station
Santa Teresa Treatment Plant
Almaden Valley Pipeline
Guadalupe Reservoir
Almaden-Calero Canal
Guadalupe R.
Small Pipeline
Parallel East Pipeline
East Pipeline
Milpitas Pipeline
South Bay Aqueduct (DWR)
Penitencia Treatment Plant & Delivery Main
Upper Penitencia Crk.
Calaveras Reservoir (SFWD)
Coyote Canal Extension (Not in Operation)
Coyote-Alamitos Canal (Not in Operation)
Coyote Canal
Coyote Ck.
Anderson Force Main
Anderson Hydroelectric Facility
Anderson Reservoir
Calero Pipeline
Calero Reservoir
Cross Valley Pipeline
Chesbro Reservoir
Main Ave. Recharge Ponds
Coyote Pump Station
Half Road Pipeline
Main Ave. Pipeline
San Pedro Ponds
Madrone Channel
Madrone-Llagas Pipeline
Coyote Reservoir
Uvas Reservoir
Uvas-Llagas Conduit
Uvas Ck.
Llagas Ck.
Santa Clara Conduit (USBR)
City of Gilroy Reclamation Plant & Distribution System SCVWD/Gilroy
Pajaro River
Santa Clara Conduit (USBR)
Hollister Conduit (USBR)
Santa Clara Tunnel (USBR)
Pacheco Reservoir (PPWD)
Pacheco Pumping Plant (USBR)
Pacheco Tunnel (USBR)
San Luis Reservoir (USBR/DWR)


Treatment Plants
Pumping Plants
Cities
State- water projects
Federal- water projects
Local- water projects
Naturally occuring (i.e., lakes, rivers, etc.)
Santa Clara Valley Water District
JANUARY 1, 1996
N
SACRAMENTO RIVER
Putah Creek
Lake Berryessa
Lake Hennessey
Putah Creek
Putah South Canal
NAPA RIVER
Cordelia Pumping Plant
North Bay Aqueduct
Barker Slough Pumping Plant
SAN PABLO BAY
GRIZZLY BAY
SUISUN BAY
SACRAMENTO SAN JOAQUIN DELTA
Folsom Lake
Jenkinson Lake
AMERICAN RIVER
SACRAMENTO
COSUMNES RIVER
Lake Amador
Dry Creek
Pardee Reservoir
Camanche Reservoir
MOKELUMNE RIVER
Folsom South Canal
Mokelumne River Aqueduct
New Hogan Reservoir
CALAVERAS RIVER
STOCKTON
Don Pedro Reservoir
Contra Costa Canal
San Pablo Reservoir
CCC Pumping Plant
Tracy Pumping Plant
Hetch Hetchy Aqueduct SFWD
SAN FRANCISCO
OAKLAND
Upper San Leandro Reservoir
Delta Pumping Plant
South Bay Pumping Plant
TRACY
TUOLUMNE RIVER
Lake McClure
South Bay Aqueduct
SAN FRANCISCO BAY
Lake DelValle
California Aqueduct
SAN JOAQUIN RIVER
MERCED RIVER
Crystal Springs Reservoir
Hetch Hetchy Aqueduct SFWD
Calaveras Reservoir
Penitencia Treatment Plant
Kesterson Reservoir
Vasona Pumping Plant
Santa Teresa Treatment Plant
SAN JOSE
San Luis Pump/Generating Plant
Stevens Ck. Reservoir
Cross Valley Pipeline
Anderson Reservoir
O'Neill Pump Plant
Rinconada Treatment Plant
Coyote Reservoir
Pacheco Reservoir
San Luis Drain
Vasona Reservoir
San Luis Reservoir
Lexington Reservoir
Coyote Pumping Plant
Santa Clara Conduit
Calero Reservoir
SANTA CRUZ
Guadalupe Reservoir
Almaden Reservoir
Chesbro Reservoir
Pacheco Pumping Plant (USBR)
Uvas Reservoir
Hollister Conduit (USBR)
Watsonville Conduit
Dos Amigos Pumping Plant
California Aqueduct
WATSONVILLE
MONTEREY
Little Panoche Reservoir